

Remarks

In the non-final Office Action dated March 4, 2008 claims 1-39 are pending. Claims 1-39 have been rejected. The Applicants have amended claims 1, 3, 5, 6-9, 11, 13, 14, 16, 18-22, 24, and 26. The Applicants have cancelled claims 2, 4, 10, 12, 15, 17, 23, 25, and 27-39. The Applicants traverse the rejection herein.

35 U.S.C. § 103 Rejection

The Examiner has rejected claims 1-39 under 35 U.S.C § 103(a) as being obvious in view of various combinations of U.S. Publication 2003/0023590 (Atkin), U.S. Patent 6,906,811 (Teradaira), and U.S. Patent RE38,758 (Bloomberg). The Applicants submit that the remaining claims are non obvious in view of the cited art.

A print stream contains various representations of data to be printed. For example, the print stream may contain pictures, simple text, or in some cases, complex text such as Unicode complex text. Unicode complex text is an encoding standard used to represent many different character sets and glyphs (pictorial represented languages, such as Chinese or Hebrew). Some languages are printed and read from left to right, and others are printed and read from right to left. In some cases, portions of languages require that the left to right or right to left orientations change depending on what characters are being printed. In the case of Unicode complex text, this is accomplished by processing the Unicode complex text print stream to modify the character placements on a page layout. Because processing the Unicode complex print stream requires computational effort, it may be desirable to disable this processing for print draft or print proofing operations.

Amended claim 1, paraphrased herein, recites a method of controlling the downstream processing of Unicode complex text in a print stream. According to the method, a print stream is received containing Unicode complex text. A control parameter is then inserted into the print stream before the Unicode complex text to enable or disable the downstream processing and to control the type of downstream processing of the Unicode complex text.

In contrast, Atkin discloses a method for including metadata within a Unicode character stream. Metadata, as defined by Wikipedia (www.wikipedia.org) is "data about data". Metadata allows data to be understood by giving the data contextual meaning. For example, the meaning of the number string 80302 has no contextual meaning without the assignment of a "postal zip

code" metadata assignment. While Atkins may suggest a method for including metadata within a Unicode data stream, the Applicants submit that Atkins does not teach or reasonably suggest that including metadata in the Unicode data stream indicates a type of downstream processing for the Unicode complex text in the print stream or enables or disables the downstream processing of the Unicode complex text in the print stream, as recited in claim 1 of the pending application.

Teradaira discloses sending text and graphics data to a printer for printing (Column 8, lines 21-25). In Teradaira, the data sent to the printer may include portions which look like real time commands to the printer. When the data to be printed contains such 'false' real time commands, the printer will act on the data as if they were commands sent to the printer. Teradaira suggests solving this problem by inserting a RTP (real time processing disable) command before the 'false' real time command within the print data. This allows the printer to ignore the 'false' real time commands within the print stream sent to the printer. The Applicants submit that Teradaira does not teach or reasonably suggest a process to indicate a type of downstream processing for the Unicode complex text in the print stream or enable or disable the downstream processing of the Unicode complex text in the print stream, as recited in claim 1 of the pending application. In Teradaira, inadvertent 'false' real time commands in a print stream are ignored. Furthermore, the 'false' real time commands being ignored are not commands for processing Unicode complex text in the print stream. The Applicants therefore submit that amended claim 1 is novel and non-obvious in view of the cited art for at least the reasons provided above. Independent claims 7, 14, and 20 are novel for at least the same reasons, as are the remaining dependent claims.

Conclusion

The Applicants submit that the remaining claims are novel and non-obvious over the cited art, and therefore respectfully ask the Examiner to allow the remaining claims.

Respectfully submitted,

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